



# FLUOROSILICIC ACID

UN 1778

Shipping Name: Fluorosilicic acid

Other Names: FKS

Fluosilicic acid

Hexafluosilicic Acid

Silicofluoric acid

Sand acid

Hydrogen hexafluorosilicate



**WARNING!** • POISON! BREATHING THE VAPORS CAN KILL YOU! SKIN AND EYE CONTACT CAUSES SEVERE BURNS AND BLINDNESS!

- Firefighting gear (including SCBA) does not provide adequate protection. If exposure occurs, remove and isolate gear immediately and thoroughly decontaminate personnel

## Hazards:

- Vapors are heavier than air and will collect and stay in low areas
- Container may BLEVE when exposed to fire
- Decomposition products upon heating include toxic hydrogen fluoride
- Corrosive to glass and stoneware

## Awareness and Operational Level Training Response:

- Do not put yourself in danger by entering a contaminated area to rescue a victim
- Stay upwind and uphill
- Determine the extent of the problem
- Isolate the area of release or fire and deny entry
- For container exposed to fire evacuate the area in all directions because of the risk of BLEVE
- Evacuate or shelter in place the immediate area and downwind for a large release
- Notify local health and fire officials and pollution control agencies
- If material or contaminated runoff enters waterways, notify downstream users of potentially contaminated water

## Description:

- Colorless to straw colored liquid
- Unpleasant sour odor
- Soluble in water with the release of heat
- Nonflammable
- Vapors are heavier than air and will collect and stay in low areas
- Freezes at 63° F

## Operational Level Training Response:

### RELEASE, NO FIRE:

- Stop the release if it can be done safely from a distance
- Prevent material and runoff from entering sewers and waterways if it can be done safely well ahead of the release
- Use large amounts of water well away from the material to disperse vapors - contain runoff
- Ventilate confined area if it can be done without placing personnel at risk
- If in a building, evacuate building and confine vapors by closing doors and shutting down HVAC systems

### FIRE:

- Material does not burn; fight surrounding fire with an agent appropriate for the burning material
- Cool exposed containers with large quantities of water from unattended equipment or remove intact containers if it can be done safely
- If cooling streams are ineffective (venting sound increases in volume and pitch, tank discolors or shows any signs of deforming), withdraw immediately to a secure location

## First Aid:

- Do not put yourself in danger by entering a contaminated area to rescue a victim
- Provide Basic Life Support/CPR as needed
- Decontaminate the victim as follows:
  - ♦ Inhalation - remove the victim to fresh air and give oxygen if available
  - ♦ Skin - remove and isolate contaminated clothing (including shoes) and wash skin with soap and large volumes of water for 15 minutes
  - ♦ Eye - rinse eyes with large volumes of water or saline for 15 minutes
  - ♦ Swallowed - do not make the victim vomit
- Seek medical attention
- Toxic effects may be delayed
- For skin burns decontaminate with water and apply a clean dry dressing
- Note to physician: skin burns can be treated with calcium gluconate gel

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